

Keith Steward, Ph.D.

AWS GenAI Platform Architect | Cloud DevOps & Reliability Engineer

Boston, MA | 508-318-8035 | keith.steward@gmail.com

[LinkedIn](#) | IntelligentDataWorks.ai | [IDW LinkedIn](#)

PROFILE

Hands-on AWS GenAI platform architect who turns emerging AI services into secure, repeatable production capabilities. Built and deployed an AWS Bedrock AgentCore customer-service agent with Strands and CDK, and created an enterprise GenAI platform supporting 70+ automations across 20+ workflows. Combines AWS architecture, infrastructure as code, CI/CD, DevSecOps, observability, governance, and reliability with experience advising 200+ enterprises. Brings the technical depth to industrialize GenAI platforms, create reusable deployment patterns, and improve operational resilience.

SELECTED QUALIFICATIONS

- **AWS GenAI Platforms:** Bedrock, AgentCore, Strands, agents, RAG, vector search, production architecture, governance, and reusable services
- **Platform Automation:** AWS CDK, CloudFormation, infrastructure as code, CI/CD, automated deployment, DevSecOps, and environment standards
- **Cloud Operations:** availability, scalability, resiliency, monitoring, observability, logging, incident improvement, security, and cost controls
- **Technical Leadership:** enterprise advisory, architecture reviews, roadmap planning, delivery governance, risk management, mentoring, and distributed teams

PROFESSIONAL EXPERIENCE

Technical Co-Founder | Intelligent DataWorks | Boston, MA | Aug 2023 to Present

Build and operate production GenAI platforms while remaining hands-on in architecture, cloud engineering, automation, and software delivery.

- Built and deployed a customer-service AI agent on AWS Bedrock AgentCore using the Strands framework and AWS CDK infrastructure as code, including deployment to the managed agent runtime.
- Architected and helped build AssistX, a production GenAI platform combining Python, FastAPI, PostgreSQL/PGVector, LLMs, RAG, agents, LangChain, LangGraph, APIs, and AWS services.
- Delivered the initial production platform within eight months, supporting 70+ AI automations across more than 20 workflows and accelerating selected work by up to 50x.
- Established reusable controls for prompt safety, validation, human review, evaluation, observability, data isolation, security, multi-tenant operation, and LLM cost management.
- Initiated strategic acquisition discussions regarding IDW's AI platform as part of a planned transition to a senior AI/engineering leadership role.

Senior Director of Engineering | SuccessKPI | Remote | Jun 2022 to Aug 2023

Directed architecture and production delivery for an AWS-based enterprise workforce-management SaaS platform.

- Translated detailed requirements into AWS architecture, algorithms, Python services, APIs, data flows, work breakdown, testing, CI/CD, and iterative releases.
- Led a distributed seven-person engineering team through Agile delivery of forecasting, optimization, scheduling, analytics, and automated communications integrated with major contact-center platforms.
- Delivered the first production release within six months and onboarded enterprise customers while maintaining software quality, operational reliability, and release discipline.

Senior Director, Data Analytics & Operations | TriMark USA | Mansfield, MA | Aug 2021 to May 2022

Owned AWS data-platform modernization for a \$1B+ organization integrating 11 acquired businesses and heterogeneous ERP systems.

- Defined an AWS data-lake architecture and delivery roadmap with more than 50 prioritized use cases spanning Finance, Marketing, Supply Chain, and executive reporting.
- Delivered the company's first AWS data lake within seven months, automating nightly ingest, cataloging, normalization, and distributed querying across 11 divisions.
- Reduced cross-ERP reporting from roughly two months to one day while establishing repeatable pipelines, governance, and an operational foundation for analytics and machine learning.

Technical Lead, Cloud Data Privacy & AI Governance | MassMutual | Boston, MA | Nov 2020 to Aug 2021

Established secure AWS architecture and hands-on engineering across five enterprise privacy and AI-governance initiatives.

- Partnered with Enterprise Architecture and Site Reliability Engineering to define secure AWS patterns spanning IAM, Kubernetes, serverless services, infrastructure as code, testing, and CI/CD.
- Introduced AWS CDK to accelerate repeatable cloud provisioning and guided use of Control Tower, EventBridge, ECS/Fargate, MSK/Kafka, Macie, API Gateway, and Aurora Serverless.
- Advised AI Governance & Ethics on MLOps, model transparency, bias, drift, monitoring, auditability, and SageMaker-based lifecycle controls.
- Delivered the first cloud-native privacy-rights platform within eight months, automating approximately 90% of a formerly manual workflow.

VP of AI/ML | NorthBay Solutions | Boston, MA | Jan 2019 to Nov 2020 | (Role ended in company-wide COVID layoff).

Recruited out of AWS by the NorthBay Solutions CEO to establish a new AI/ML practice and reusable cloud delivery capability.

- Proposed an AWS Data Lake and ML accelerator, built the initial full-stack platform hands-on with Python and AWS, and guided a distributed team toward customer demonstrations and production delivery.
- Advised enterprise customers on AI strategy, AWS architecture, data lakes, Neptune knowledge graphs, security, and production machine-learning adoption.

Senior Specialist Solutions Architect, AI/ML & Big Data | Amazon Web Services | Boston, MA | May 2015 to Dec 2018

Advised enterprises and AWS technical communities on production AI/ML, platform architecture, distributed data, and cloud adoption.

- Advised 200+ enterprise customers on AWS AI/ML strategy, SageMaker, TensorFlow, EMR, Spark, data lakes, distributed systems, security, scalability, and production architecture.
- Founded and led AWS technical communities for Big Data and AI/ML, growing the AI/ML community to 80+ global specialists through standards, mentoring, workshops, and reusable technical assets.
- Created 170+ enablement assets, trained 180+ solution architects, contributed to AWS certification exams, and delivered 50+ technical presentations and workshops.

EARLIER RELEVANT EXPERIENCE

- As Director of Software at Dimensional Photonics, architected and operated a fault-tolerant AWS cloud platform using Python, Cassandra, REST services, CloudWatch, DataDog, load balancing, and auto scaling with no significant downtime.
- Led delivery of the associated FDA-cleared, HIPAA-governed connected dental product and cloud service to commercial launch in less than 1.2 years.

EDUCATION & RECOGNITION

Ph.D., Molecular Biology / Microbiology & Immunology, University of Western Ontario. AWS ML Elite Gold and Platinum; AWS re:Invent Rockstar; named inventor on multiple patents.

TECHNOLOGIES

AWS • AWS Bedrock • Bedrock AgentCore • Strands • AWS CDK • CloudFormation • platform engineering • CI/CD • infrastructure as code • DevSecOps • cloud operations • observability • logging • CloudWatch • DataDog • incident improvement • cost controls • GenAI • LLMs • AI agents • RAG • LangChain • LangGraph • Python • FastAPI • REST APIs • PostgreSQL • PGVector • vector databases • Kubernetes • Docker • ECS/Fargate • EventBridge • API Gateway • SageMaker • TensorFlow • EMR • Spark • data lakes • distributed systems • microservices • IAM • Linux • Git • Cassandra